

# Y4 Autumn 2 Burps, Bottoms and Bile



Open wide – let's take a look inside. We're on a voyage of discovery to investigate the busy world inside your body. Do you have a toothy grin or a winning smile? Take dental impressions and test the effects of sugary substances on your pearly whites. Follow a tasty morsel as it makes its way through your digestive system, helped by some mouthwatering saliva. And don't forget the importance of good hygiene at both ends. And whilst we're talking business, could you recognise an animal just by its poo? Are you brave enough to take the challenge? Learn how to look after this marvellous belching, squelching, mixture making machine we call our body.

## Human Digestion

Humans need to absorb proteins, carbohydrates, fats, vitamins and minerals from their food to keep healthy and have enough energy to live and work. The job of the digestive system is to break down food so it can be absorbed and used by the body.

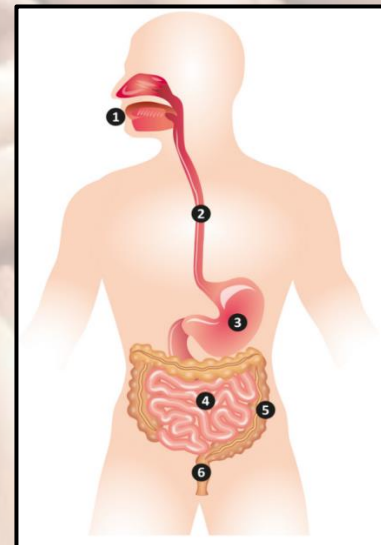
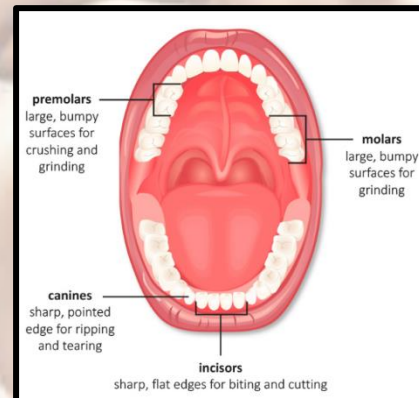
## Help your child prepare for their topic!

Why not keep a joint food diary for a week to see if you eat enough gut-friendly foods? You could also try a new food or drink that you've never tasted before. What do you like or dislike about its taste and texture?

Alternatively, drop copper coins into a range of fizzy drinks overnight to see what happens. Which drink has the most powerful cleaning

## Teeth

Teeth are hard, white objects in the mouth that are used for biting & chewing. Humans have two sets of teeth over their lifetime. The first set of 20 teeth are called deciduous or milk teeth. These are gradually replaced by 32 permanent adult teeth from about six years old.



## The digestive system

- 1) Teeth chew the food into small pieces in the mouth. These pieces mix with saliva containing enzymes to start digestion.
- 2) The muscles in the oesophagus move a ball, or bolus, of food down to the stomach.
- 3) The muscles in the stomach churn the food and acids and enzymes break it down. This can take 2-6 hours.
- 4) Partially digested food travels through the small intestine and nutrients are absorbed into the body. This can take 3-5 hours.
- 5) The large intestine removes excess water from the food that can't be digested to make solid faeces (poo).
- 6) The faeces are stored in the rectum ready to leave the body.

Science	Regular teeth brushing, limiting sugary foods and visiting the dentist are important for good oral hygiene.
	There are four different types of teeth: incisors, canines, premolars and molars. Incisors are used for cutting. Canines are used for tearing. Premolars and molars are used for grinding and chewing. Carnivores, herbivores and omnivores have characteristic types of teeth. Herbivores have many large molars for grinding plant material. Carnivores have large canines for killing their prey and tearing meat.
	Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected.
	The digestive system is responsible for digesting food and absorbing nutrients and water. The main parts of the digestive system are the mouth, oesophagus, stomach, small intestines, large intestines and rectum. The mouth starts digestion by chewing food and mixing it with saliva. The oesophagus transports the chewed food to the stomach, where it mixes with stomach acid and gets broken down into smaller pieces. In the small intestine, nutrients from the food are absorbed by the body. In the large intestine, water is absorbed by the body. The remaining undigested waste is stored in the rectum before excretion through the anus.
	An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time.
	Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams.
DT	Healthy snacks include fresh or dried fruit and vegetables, nuts and seeds, rice cakes with low-fat cream cheese, homemade popcorn or chopped vegetables with hummus. A healthy packed lunch might include a brown or wholemeal bread sandwich containing eggs, meat, fish or cheese, a piece of fresh fruit, a low-sugar yoghurt, rice cake or popcorn and a drink, such as water or semi-skimmed milk.
	There are five main food groups that should be eaten regularly as part of a balanced diet: fruit and vegetables; carbohydrates (potatoes, bread, rice and pasta); proteins (beans, pulses, fish, eggs and meat); dairy and alternatives (milk, cheese and yoghurt) and fats (oils and spreads). Foods high in fat, salt and sugar should only be eaten occasionally as part of a healthy, balanced diet.
	A comparison table can be used to compare products by listing specific criteria on which each product can be judged or scored.
	Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Music	Performing: Children cook up a musical feast, enjoying a varied diet of healthy beans, toxic Tudor banquets and DIY pizza before celebrating in a song performance.
PE	Invaders: To use ABC (agility, balance, co-ordination) techniques to keep control of a ball in a competitive situation.
IT	Digital Publisher: Word processing & Presentations